

## REMARKS

Claims 1-18 are pending in the present application.

Claims 1-18 are believed to be in condition for allowance for the reasons set forth herein.

### Claim Rejections - 35 USC § 102

Claims 1-3 and 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 09-3028433 to Mochizuki et al. We respectfully contend that JP 09-3028433 to Mochizuki et al. is an improper reference. The publication date of Mochizuki et al. is not provided thereby prohibiting Applicant from determining if the reference is, in fact, prior art. The date on the cover is listed as June 2002. The application was filed on 2/14/2001 which is well prior to the date of the reference. Furthermore, Japanese references have six digits rather than the seven digits cited.

Applicants respectfully request that Mochizuki et al. be properly referenced or the rejection be withdrawn.

Even if Mochizuki et al. is properly referenced the rejection is improper.

The Office argues that Mochizuki et al. discloses a silica or silicate particles dispersed in a cation-modified polyvinyl alcohol (PVA) that inherently produce

silicon/silanol/silane modified polyvinyl alcohol, which is made by copolymerizing vinyl acetate monomer and silane monomer. This argument has no basis in fact.

Mochizuki et al. teaches solid particles in a hydrophilic binder (see [0019]). The solid particles include silica among other things(see [0021]. The hydrophilic binder includes polyvinyl alcohol and/or cationic denatured polyvinyl alcohol (see [0022]). Nowhere in the disclosure or otherwise is there any teaching that would lead one of ordinary skill in the art away from the vast array of chemical knowledge to conclude that solid silica in PVA would yield a copolymer of PVA and silane monomer. This chemical construction can only be arrived at by ignoring the term copolymer. If the Office has any reference indicating that mixing solid particles of silica with PVA would yield a copolymer Applicants respectfully request that such reference be properly cited. Even more curious is the insistence of the Office to equate a mixture of solid silica and PVA with a hydrolyzed copolymer of vinyl acetate and silane monomer.

In making the rejection the Office has ignored the facts set forth previously in the specification and previous arguments that a hydrolyzed copolymer of vinyl acetate and silane monomer is a true copolymer not a mixture of a distinct solid and a polymer. The Office continues to equate a mixture

of a solid and a polymer, which at best forms a chelate, with a copolymer which is a polymer containing dissimilar monomers.

In support of the position Applicants cite JP58174604 and U.S. Patent 4,097,436 to Buning et al. both of which are cited in an Information Disclosure filed herewith. These references clearly demonstrate the copolymerization of a vinyl silane polymer. Copolymers such as those in Col. 4 are formed wherein the silicon containing molecule is a substituent on the polymer chain.

Silica is further incorporated in embodiments, such as in claim 2, as a pigment. This can not be confused with a hydrolyzed copolymer of vinyl acetate and silane monomer. Silica is a pigment particle which does not become integral to the polymer. The observation by the Office that Mochizuki et al. recites certain size particles does not provide any teachings of the polymer of claim 1.

The rejection of claim 1 is improperly based on art which does not teach the invention and is therefore improper. Claims 2, 3 and 6-8 depend from claim 1 and are patentable for, at least, the same reasons as claim 1.

Applicants respectfully submit that Mochizuki et al. is improperly cited and may not represent prior art. Even if Mochizuki et al. can be properly cited it does not anticipate the claims.

Claim Rejections - 35 USC § 103

Claims 1, 4-5 and 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over USP 6,238,784 to Mochizuki et al. in view of USP 5,853,540 to Niemoller et al. and further in view of USP 6,022,440 to Nordeen et al.

Mochizuki is cited as teaching a hydrolyzed copolymer of vinyl acetate monomer and silane monomer. This is not provided by Mochizuki. The argument that silicon and silicon containing compounds would yield a final product with a similar structural makeup found in a hydrolyzed copolymer of vinyl acetate and silane monomer is unsupported by any factual showing. The present invention is not a "combination of PVA and silica" but is a hydrolyzed copolymer of vinyl acetate and silane monomer.

Niemoller is cited as teaching the cationic mordants of claim 10. Niemoller, like Mochizuki does not teach the hydrolyzed copolymer of the present invention. The combination of Mochizuki and Niemoller do not teach the hydrolyzed copolymer of the present invention and therefore, do not teach the invention as claimed.

Nordeen is cited for teachings of an ink jet image composite and method of making the same. The Office argues that combining the ink jet sheet of Mochizuki with the

adhesive polymers of Nordeen would render the present claims obvious. Nordeen does not provide teachings which overcome the deficiencies of Mochizuki.

The rejection of claims 1, 4-5 and 9-15 as being unpatentable over Mochizuki in view of Niemoller and further in view of Nordeen is improperly based on teachings which are not included therein. Specifically, the hydrolyzed copolymer of the present claims is absent from the cited art.

Removal of the rejection is proper and respectfully requested.

Claims 1 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over USP 6,238,784 to Mochizuki et al. in view of Kobayashi et al.

The Office opines that Mochizuki expressly discloses the claimed invention. This is refuted herein as improper. Kobayashi is cited for teachings of a PET support. Kobayashi provides no teaching which would mitigate the deficiencies of Mochizuki et al. and therefore the combination fails to obviate claims 1 and 16 due to the failure to teach the hydrolyzed copolymer of the claims.

Removal of the rejection is proper.

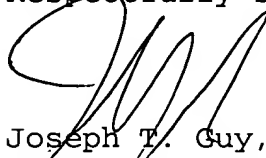
#### Newly Entered Claims

Claims 17 and 18 are newly entered, patentably distinct, claims. No new matter has been entered as a result of entering claims 17 and 18. Review of claims 17 and 18 on the merits is respectfully requested.

# CONCLUSIONS

Claims 1-18 are pending. All claims are in condition for allowance. A notice of allowance is respectfully requested.

Respectfully submitted,



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